Some City Houses that are small but well designed

THE BUILDING REVIEW

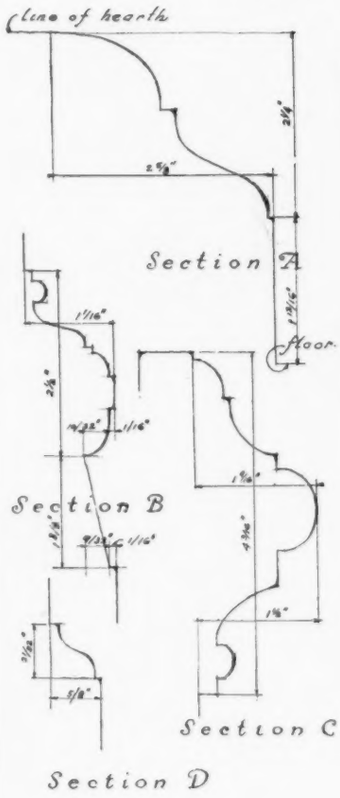
LIBRARY OF CONGRESS
APR 18 1922
COPYRIGHT DEPOSIT

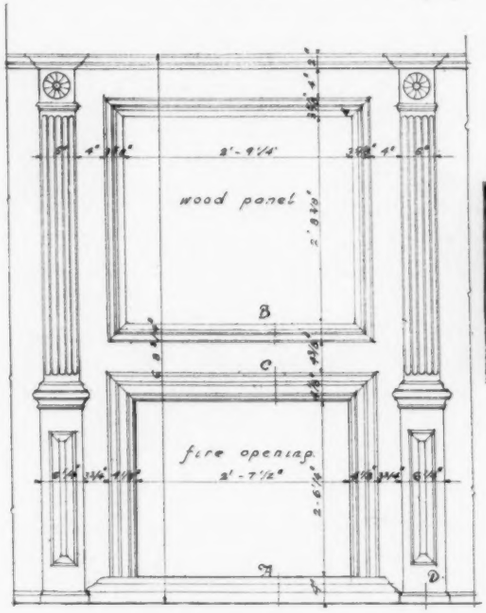
MARCH, 1922

25 Cents Vol. XXI No. 3

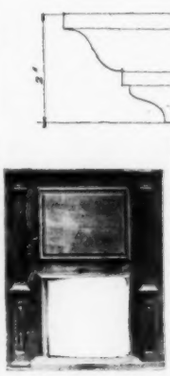
Published in San Francisco

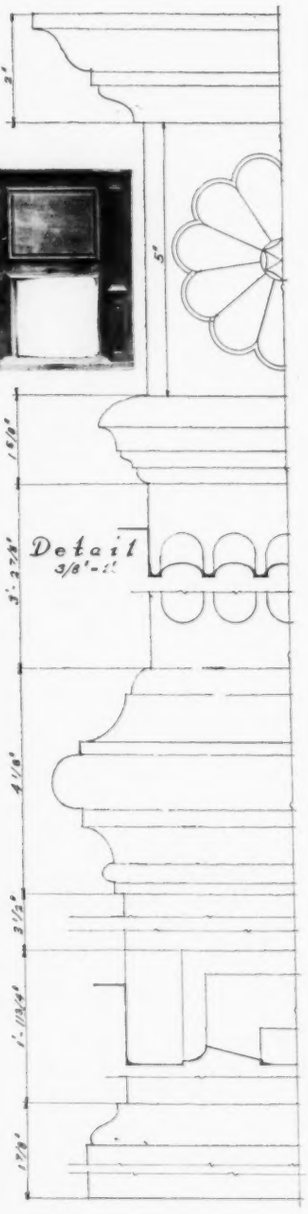
All sections are drawn one half full size

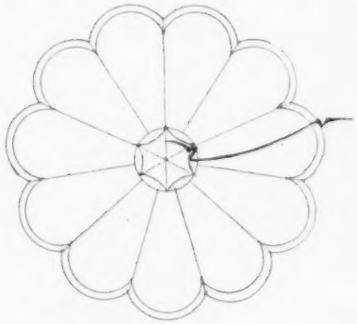




Elevation
scale 1/2"-1'-0"







Rosette

Kyanize
KY-A-NIZE

ARCHITECTS!

This is one of a series of twelve drawings. The full set, representing exemplary types of

Colonial Architecture

will be sent to any Architect requesting them.

BOSTON VARNISH CO.
1151 Mission Street
San Francisco

MANTEL FROM A HOUSE IN COVENTRY CONN

Now in the Metropolitan Museum of Art

NEW YORK CITY

Measured & drawn by
Edgar & Verna Cook Salomonsky

Kyanize
WHITE ENAMEL
SERIES OF MEASURED DRAWINGS

SHEET
NO. 1

The Responsibility of Architects.

BEING an architect is a man-sized undertaking. It requires more training than many other professions. Every building you create is a monument to your success or failure.

Your work must be seen by the public, and by it you are judged. In the old days the erection of a structure was a relatively easy matter. Not so today. The modern architect must be an artist, engineer, estimator and executive combined.

No one man can excell in every one of these combined activities—he must leave details to others. He must know manufacturers on whose products he can rely on absolutely. These lists of manufacturers he must continually be reminded of—of the products they offer and the service they give.

Fuller's has become a synonym for paints and varnishes that are dependable. Such confidence has not been accidental, but the result of many years of developing Paints and Varnishes which architects can safely specify. A few of these we list,—

FULLER'S PIONEER WHITE LEAD has been specified by architects for years, because it has an unfailing habit of making good. Master and journeymen painters are pleased when Fuller's is selected for the project.

FULLER'S SILKENWHITE ENAMEL for all interior work where a quality product is demanded. Obtainable in high gloss finish and eggshell effect.

PIONEER SHINGLE STAINS—Protective, preservative, and beautifying. A most desirable product for all shingled surfaces.

WASHABLE WALL FINISH is a decorative and durable finish for interior walls of plaster, or wall-board. The soft-toned colors lend themselves admirably to any decorative scheme.

FULLER'S CONCRETA damp-proofs and beautifies all concrete, stucco and brick surfaces. Dries with soft, mellow tones.

FULLERWEAR, "the spar varnish for every purpose." Can be applied to all varnishable surfaces, either interior or exterior. Withstands wear and tear to a remarkable degree.

W. P. FULLER & CO.

"Since '49"

Boise
Tacoma
Santa Monica
San Francisco
San Bernardino

Sacramento
Los Angeles
Oakland
Stockton
Fresno

Spokane
San Diego
Hollywood
Long Beach
Yakima

Seattle
Salt Lake City
Pasadena
Portland
Walla Walla

THE BUILDING REVIEW

VOL. XXI. MARCH, 1922 No. 3

Published Monthly by the Building Review Company,
50 Main Street, San Francisco, California

Editors—Harris Allen and Henry H. Gutterson.

Industrial Editor—L. Campbell. Business Mgr. H. R. Braden

Advertising Manager—W. P. Hughes

CONTENTS

Cover—Entrance, House in Fourth Avenue Tract, San Francisco

PLATES

	Page
Houses in Fourth Avenue and Fulton Street Tract, San Francisco, Earle B. Bertz, Architect	29-37
Houses in Seacliff Tract, San Francisco, Earle B. Bertz, Architect	38-40

TEXT

An Urban Oasis, Harris Allen, Author	27
The Jones Trade Zone Bill, H. M. Robinson, Author	29
Official News of Pacific Coast Chapters, A. I. A.	34
Editorial	35

THE GARDEN

The California Garden, A. M. Woodman, Author	31

INDUSTRIAL

Industrial Section	36-40
Glass Making on Pacific Coast	36
Elaterite—a New Flooring Material	37
Builders' Exchange Annual Banquet	38
Furnace That Ventilates	38
Open Fire—With or Without Heat. What Magicoal Is	40
Glass Bricks From Broken Bottles	40

Yearly subscription—United States, $2.50—foreign, $3.00. Single copies, 25 cents.

Entered as second-class matter in the San Francisco Postoffice under the Act of August 24, 1912. Previously entered as "The Architect."

The editors will be pleased to consider contributions of interest to the Industry. When payment for same is desired, this fact should be stated.

News stands and dealers supplied through San Francisco News Co., San Francisco, Calif., or American News Co., New York, N. Y.

Architect, designer, varied experience, long practice, University of Pennsylvania, Cornell University, Certificated Architect in both Pennsylvania and California.

Solicits correspondence as to partnership, in architectural practice or construction company, etc., would also consider administrative position with interest in business allied to Building or Architecture. Address, Building Review.

The Mightiest Servant in California

Picture in your mind a strong, tireless servant—one ever alert—one that constantly serves, day and night, over 1,700,000 people.

Think of a servant—so domesticated that it warms, lights, and makes comfortable the homes of the land—so vigorously powerful that it whirls the massive wheels of factories and hauls trains at breakneck speed.

The Pacific Gas and Electric Company is such a servant. Its service lightens the burdens of housewives. It enables the farmers to take advantage of labor- and time-saving devices. Industries rely upon it for power, light and fuel.

Service is the only thing this Company has to sell, a service so great — important — necessary —that confusion, disaster and even loss of life would result if it were not constantly maintained.

Pacific Gas and Electric Co.

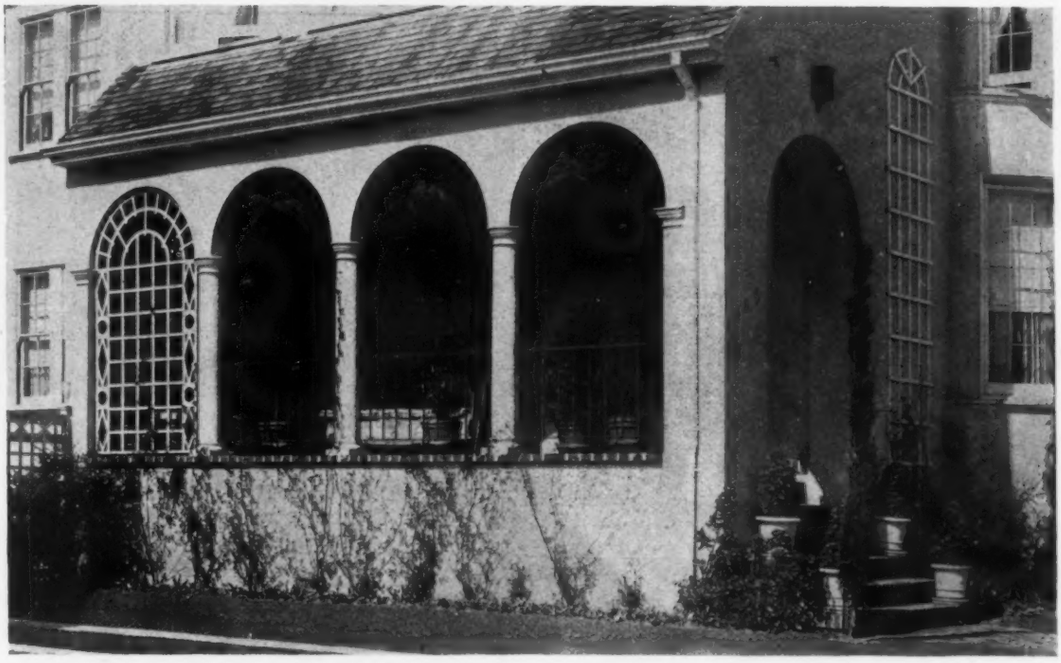
P · G · and E ·

"PACIFIC SERVICE"

P-05:2-1 In.

The
BUILDING REVIEW

VOL. XXI. SAN FRANCISCO, MARCH, 1922 No. 3



ENTRANCE DETAIL, SEA CLIFF EARLE B. BERTZ, ARCHITECT

AN URBAN OASIS

By Harris Allen

It is a saddening and a discouraging experience to motor through the newer streets of the average large city, and observe the general type of small house.

One sees miles of commonplaces with hardly a single redeeming feature. Block after block presents a combination of clumsy "dry-goods boxes," with fantastic abortions whose wild vagaries of outline leave the famous "Cabinet of Dr. Caligari" far behind in the contest for supreme decadent distortion.

With what surprise and relief, then, does one come upon a block of simple, attractive houses, well designed and well built, blooming in the midst of the heterogeneous mass like a lily in the mud—an oasis in a desert!

A real estate firm which has the courage and intelligence to carry out such a project deserves the gratitude of the community. It is creditable, of course, to develop a fine residence tract, restricted and parked; these are distinct assets to a city. But their effect in necessarily limited. Here, on the other hand, is an object-lesson available to thousands. It is inevitable that recognition will come, gradually, of the contrast between the quiet good taste of this block and the garish vulgarity of its neighbors.

Mr. Bertz has had both a problem and an opportunity; he has solved one and seized the other. He had a free field and a free hand, with no existing buildings whose architectural treatment must be adopted or adapted, or else left as a jarring note. On the other

hand, there were certain economic conditions confronting him.

A standard unit plan was necessary, in order to lower the total cost and to establish a standard average selling price. To meet the general demand, each house must contain a garage.

The solution was a happy one. The standard plan was varied in one particular; half the houses were given an outside entrance with cement steps and landing, while the remainder have an "English basement entrance." In the latter case, the living room, extending across the full width of lot, was larger by the width of the outside steps.

This arrangement varied the wall line by its alternate break, and reduced the number of ground floor openings.

The architectural treatment of the house-fronts shows a well-studied scheme resulting in harmony without monotony. The general vista is quite suggestive of a charming English village street; an Italian spirit creeps in here and there without disturbance. There is a very effective silhouette resulting from the varying gables and eaves, which are placed with a nice sense of balance.

TYPICAL DINING ROOM, FOURTH AVE., AND FULTON TRACT, SAN FRANCISCO

TYPICAL LIVING ROOM, FOURTH AVE., AND FULTON TRACT, SAN FRANCISCO

The detail is simple and refined, and a distinctive individual character has been given to each house front. Generous use of color emphasizes the separate units; in some instances the palette is a bit exuberant, and the fading process will relieve a too vivid pink or orange (not necessarily the architect's fault; painters have been known to throw in some extra coloring matter for good measure). But on the whole the effect is very pleasing, especially in combination with tiled roof or window shutters; these broad splashes of gray or blue green are very effective against the rough stucco walls.

Eventually vines and shrubbery will add their touches of softness and grace; even now, the broad "parking" strips or green lawn are pleasant to the eye, besides ensuring more warmth and light to the houses. Trees have been set out; it needs no artist's perception to visualize a delightful picture of this block in a few years.

These little houses, with their simple dignity and good taste, do veritably constitute an oasis in a desert; for the good of the community, to preserve our faith in human appreciation, "May their tribe increase."

THE JONES TRADE ZONE BILL

By HENRY M. ROBINSON*

The Jones bill, as now amended, provides necessary machinery for the creation of foreign trade zones in, or adjacent to, American ports of entry, and authorizes the Secretary of Commerce to grant to states, municipalities and their legal subdivisions the privilege of establishing such zones. Uhereas, under the terms of the bill, both foreign and domestic merchandise may be brought into a free zone and there be broken up, assembled, mixed with foreign or domestic merchandise or otherwise manipulated for re-export, direct manufacturing, as such, may not be carried on within the proposed districts,—this in order to meet the wishes of interior communities and to allay their fears as to seaboard manufacturing competition.

Under the terms of this act, no duty is to be applied to merchandise delivered from ship to wharf within a free zone unless some part, or all, of it is taken out for domestic consumption, at which time it will pass through the Custom House and be subject to regular duty.

In other words, we may, within certain districts within our ports of entry, be a free trade nation and at the same time protect our own domestic markets from a flood of cheaply manufactured European and Asiatic goods.

It is axiomatic that, for the protection of the American manufacturer, a method must be provided for the maintenance of a merchant marine which will carry abroad the surplus of American manufactured goods; otherwise these goods must continue to back up upon our own markets and thereby reduce the earnings of our manufacturers, the profits of our merchants and the earnings of American labor itself.

There is appearing from time to time in certain publications the suggestion that most of our products are consumed at home and that only about one-seventh is available for export, and, hence, that our foreign trade is a relatively unimportant factor in our national prosperity.

Accepting these figures as true, economists generally agree that a surplus is the controlling factor. Is it not, therefore, reasonable to assume that it is the backing up our manufactured surplus and our inability to sell abroad that has brought about our unemployment situation?

Since the beginning, any nation that has engaged, with any appreciable degree of success, in international commerce has been on a free trade basis, or has maintained one or more free ports or free zones.

For years, however, we, as a nation, have maintained a high tariff, and most of the time a very high protective tariff, and, for half a century our flag has been a comparative rarity upon the seven seas.

Came the Great War, and demonstrated beyond cavil the need for the maintenance of a merchant fleet, if, in time of war, the nation is to be protected—and this, whether the war be military or economic.

Since the maintenance of a merchant fleet is obviously predicated on world trade, it is evident that a high protective tariff, world trade, the maintenance of a merchant fleet with the financial and commercial accompaniments of those operations, are inconsistent, but experiences of European nations show conclusively that a modification of this inconsistency can be brought about without definite injury to the principles involved in a protective tariff.

In fact, if the feeling continues to grow that we should engage in world trade and maintain a merchant fleet, as a necessary corollary, the principle of protection must, of necessity, be greatly modified, unless some method is devised that will permit a world trade of merchandise in and out of our important ports of entry without the delays and expense attendant on our present methods of operation.

It is true that under the present law imported merchandise may be impounded in bonded warehouses and withdrawn for transshipment, or may be impounded, withdrawn and manufactured in foreign trade with a drawback of the customs paid. This plan was intended to meet the needs of world trade, but is nearly inoperative and utterly fails of accomplishing the main purpose, in that the time consumed in vessel delays and in the unwinding of red-tape militates against such an operation.

If it be true that the cost of operation of our merchants ships is to be greater than that of the important competing nations, some method must be devised to balance that cost, and the greatest waste in the shipping business is loss of time in ports, due to the administration of complex laws and regulations—regulations, within the provinces of many different departments.

In other words, the elimination of port delays would be of tremendous economic ad-

(*President of the First National Bank of Los Angeles, and formerly Commissioner of the U. S. Shipping Board.)

vantage, for it is recognized that successful ship operation depends, to a great degree, on keeping the ship at sea.

A free zone would permit the prompt unloading of a ship within the boundaries of the zone without any of the long delays that grow out of the Custom regulations. If any part of the cargo is intended for domestic consumption, this merchandise will be passed from the zone through the Customs House instead of holding the ship until all the merchandise is checked and customs paid.

It is to be recognized that ships other than those under our flag will have the same advantage in our ports, but it is fair to assume that ships under our own flag, through a period of time, will touch more often at our ports than ships under other flags, and, to that extent, at least, there would be a factor for improvement in the cost of the operation of American vessels.

Another great advantage in the operation of our marine would be the fact that so-called "triangular voyages" could be made and cargoes moved to our ports, only a part of which would be intended for domestic consumption.

The problem of American ships has been that, while we have merchandise for export shipment, only too often it is necessary for the ships to return in ballast. The British, a free trade nation, on the other hand, until recently have been able to fill their unoccupied space in their outward bound ships with coal for foreign countries, and for bunkering, returning with cargoes of commodities from foreign countries—cargoes partly for home consumption and partly for transshipment to other countries—transshipments made without any regulatory practices that result in serious delays. This, too, because of free port zones, was equally true in the case of Germany before the war.

The establishment of free zones for America has been under discussion for many years. Shipping men, naturally, have been strongly in favor of it. They take the position that the principal advantage to the merchant bottoms ships is the ability to bring in full cargoes, or at least larger cargoes than present conditions allow, the bulk of which will be for the transshipment in American bottoms to other ports in connection with shipments of domestic merchandise.

Should the Jones Bill become a law, our protection principle will be conserved, because, otherwise, the belief that we should engage in foreign trade may, in the course of time, result in a marked modification of our tariff laws, and this may not be necessary if we can maintain our foreign trade and our merchant marine through the medium of these free zones.

Originally the propaganda for foreign trade zones, free from Customs duty, was limited in its discussion to about three ports on the Atlantic Coast and one or two on the Pacific. The bill as presented, however, contemplates the possibility of the establishment of foreign trade zones in each of the important ports of entry. This is a great stride in the right direction, for, if all of this foreign transshipment were to be done in the ports of New York, Philadelphia and New Orleans, and in only one or two ports on the Pacific, the congestion of traffic to and from these ports would place an additional burden on rail terminals already overloaded, and would result in an uneconomic transportation with the back country of merchandise intended for domestic consumption.

In other words, a fairly general distribution of these free zones should be advantageous to the whole people and not of unfair profit to a limited number.

Another thing, it is only through the adoption of a free zone policy that the protectionist, the ship operator and the foreign trader can meet on common ground, and really all that the Jones bill is attempting to do is to carry out scientifically what we are now doing most unscientifically through our bonded warehouses.

UNIVERSITY OF CALIFORNIA EXTENSION DIVISION—APPLIED MECHANICS REINFORCED CONCRETE

Evening classes for the study of Applied Mechanics and Reinforced Concrete construction are to be held in San Francisco under the direction of Harry W. Bolin of the H. J. Brunnier Company. The course will be for draftsmen, architects and engineers, and for others technically qualified.

Beginning date, Friday, March 3rd. Room 266 Pacific Building, Fourth and Market Streets, San Francisco.

Applied Mechanics—7 p. m. Useful for draftsmen, designers, architects, and all who wish to make a thorough study of mechanical engineering. Subjects treated are: motion, force, work, energy, polygon of forces, fluid pressure, moments and controids, moments of inertia, simple strains and stresses, beams and bending, deflection of beams, compound strains and stresses, columns, and stresses in framed structures.

Reinforced Concrete—8 p. m. Lectures and discussion of the applications of mechanics to concrete structures, including beams, columns, floors, etc. Among the topics are the following: bending moment and sheer, resisting moment, fiber stresses, compound stresses, columns, comparison of wood and steel with reinforced concrete beams, properties of concrete, general theory of reinforced beams, derivation of formulas, T-beams, concrete columns, reference works.

Those taking this course should be familiar with the principles of mechanics, through the extension course in Applied Mechanics or equivalent study.

Each course consists of fifteen one-hour lessons, meeting Mondays and Fridays. Fee for each course, $6.00.

Registrations for these courses are now being received at the San Francisco offices of University Extension, 264 Pacific Building and 140 Kearny Street.

THE CALIFORNIA GARDEN*

By A. M. WOODMAN

California has frequently been termed a country in itself, for probably no other country in the world possesses such a variety of climate, natural resources, and scenery, as does our state. The state abounds in native flora, and the world has been searched from end to end for new and interesting specimens of plant life. California, too, has been repeatedly eulogized by enthusiasts, who have occasionally overstepped bounds in describing the wonders of the state, claiming that it is the land of fruits and flowers, the latter blooming at our feet the year round. But most of us know that, although it is quite possible to grow a great variety of plants in luxurious fashion, still, because of semi-arid conditions it sometimes requires the utmost diligence to keep some forms growing, and up to their standards of growth.

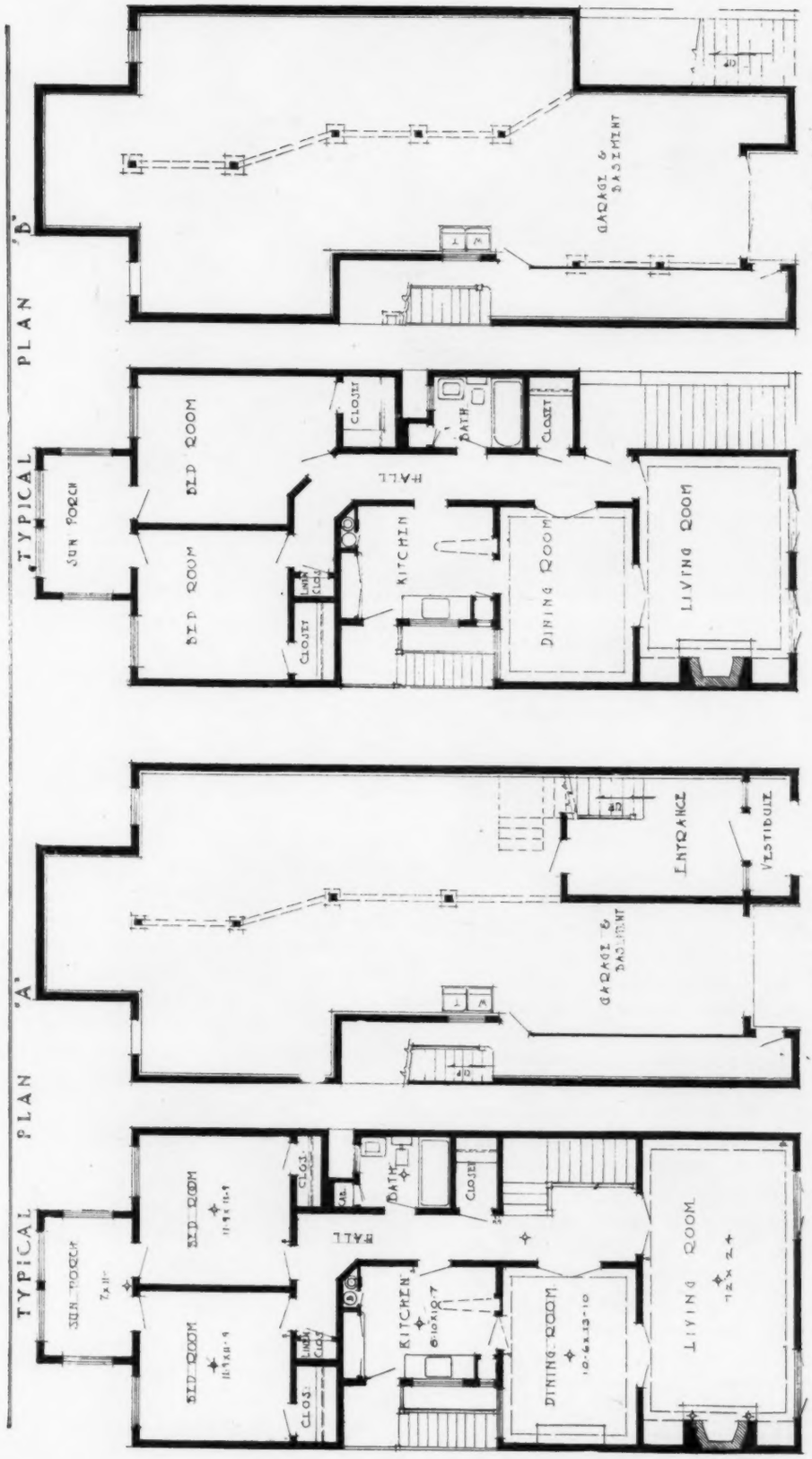
What constitutes the California garden, as distinguished from the Eastern type of garden? There is a distinct charm about the old New England garden, full of trim little paths laid out in regular fashion, seats, trellises, arches, and arbors in set places, garden plots filled with old-fashioned, sweet-scented flowers, which is not difficult to feel. So is the beauty of the formal garden, so prevalent in the East, felt, with the garden set out in regular fashion, containing fountains, pools, pergolas, sun-dials, moss-filled stepping-stone or brick walls—the whole appearing to be but an extension of the house.

It is freedom from conventionality, rather than freedom from restraint, that characterizes true Californians. It is this spirit which is reflected in California gardens. In the extreme East the spirit which prevails is that of "you must do this and you mustn't do that; observe all of the properties; do not deviate an inch from the accepted line of traditional conduct." Here in the West we are tempted to go to the other extreme—to break entirely away from established precedent and custom. But there is an obvious danger in this attitude, which must be guarded against in matters of gardening.

In California, I believe, the trend is towards a distinct informality in most of our plantings. And yet, even in informality there must be some semblance of unity of purpose and conception—in fact, it is really much more difficult to form an informal than a formal setting. Sometimes the wisest procedure seems to be to strike a happy medium between the two—to include the best features of the formal garden, giving them an informal intimate setting. In other words, we remove the austerity of too formal a treat-

(Continued on page 33)

*A paper written for the Garden Club of Alameda County.

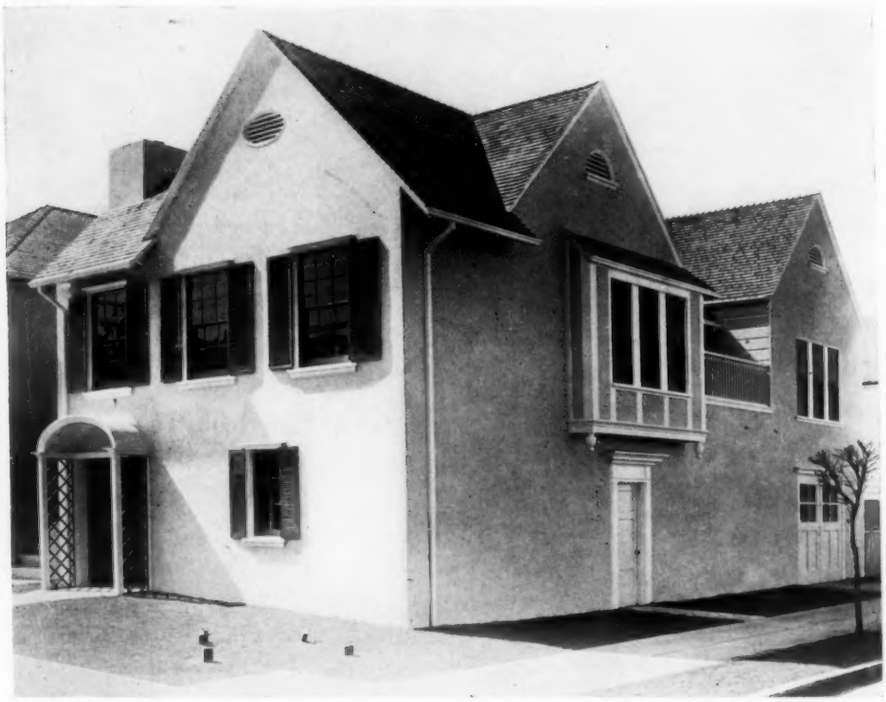


BASEMENT · FIRST · FLOOR ·
EARLE B. BERTZ, ARCHITECT

TYPE PLANS A AND B, FOURTH AVENUE AND FULTON STREET TRACT, SAN FRANCISCO

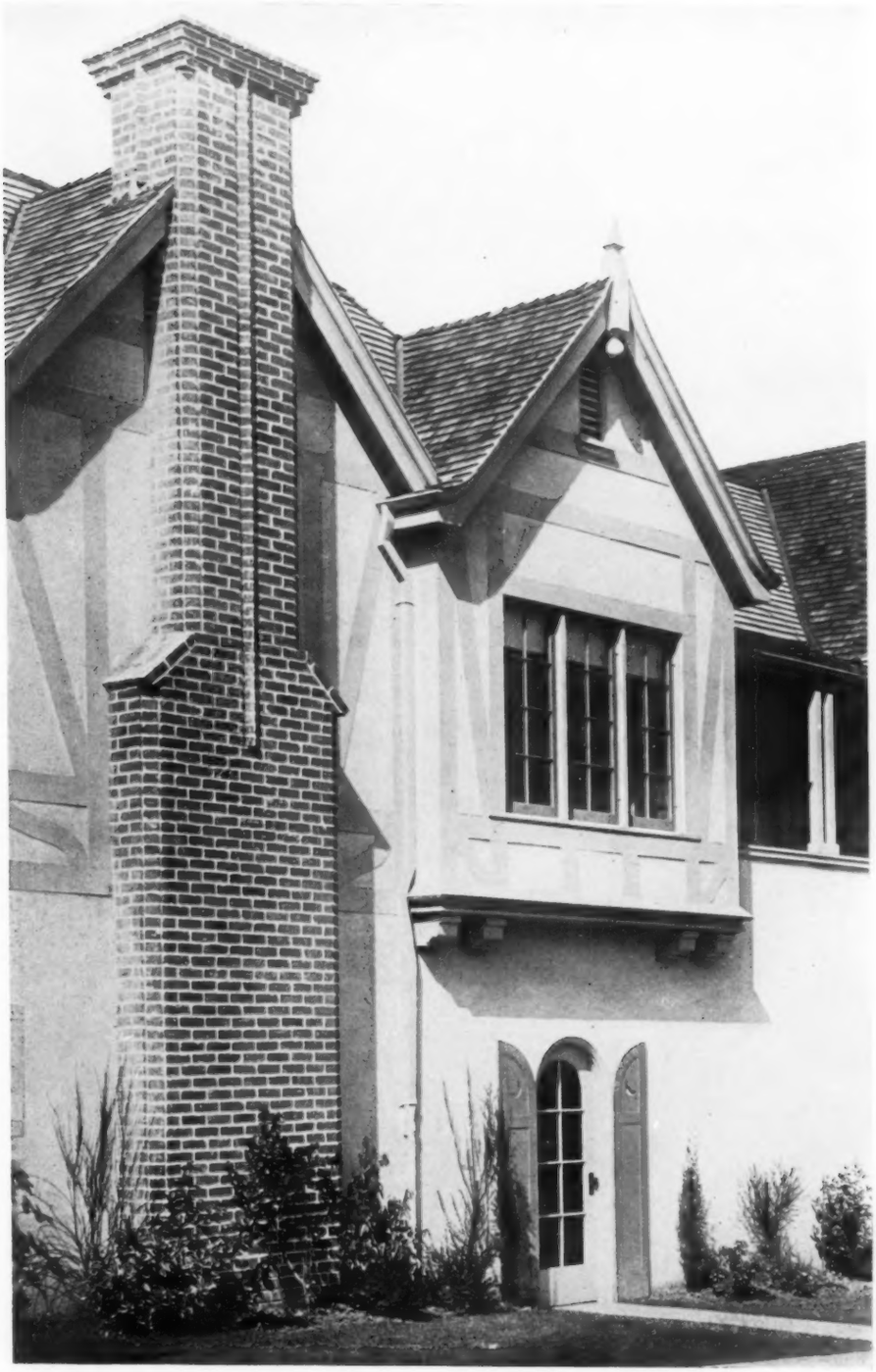
HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

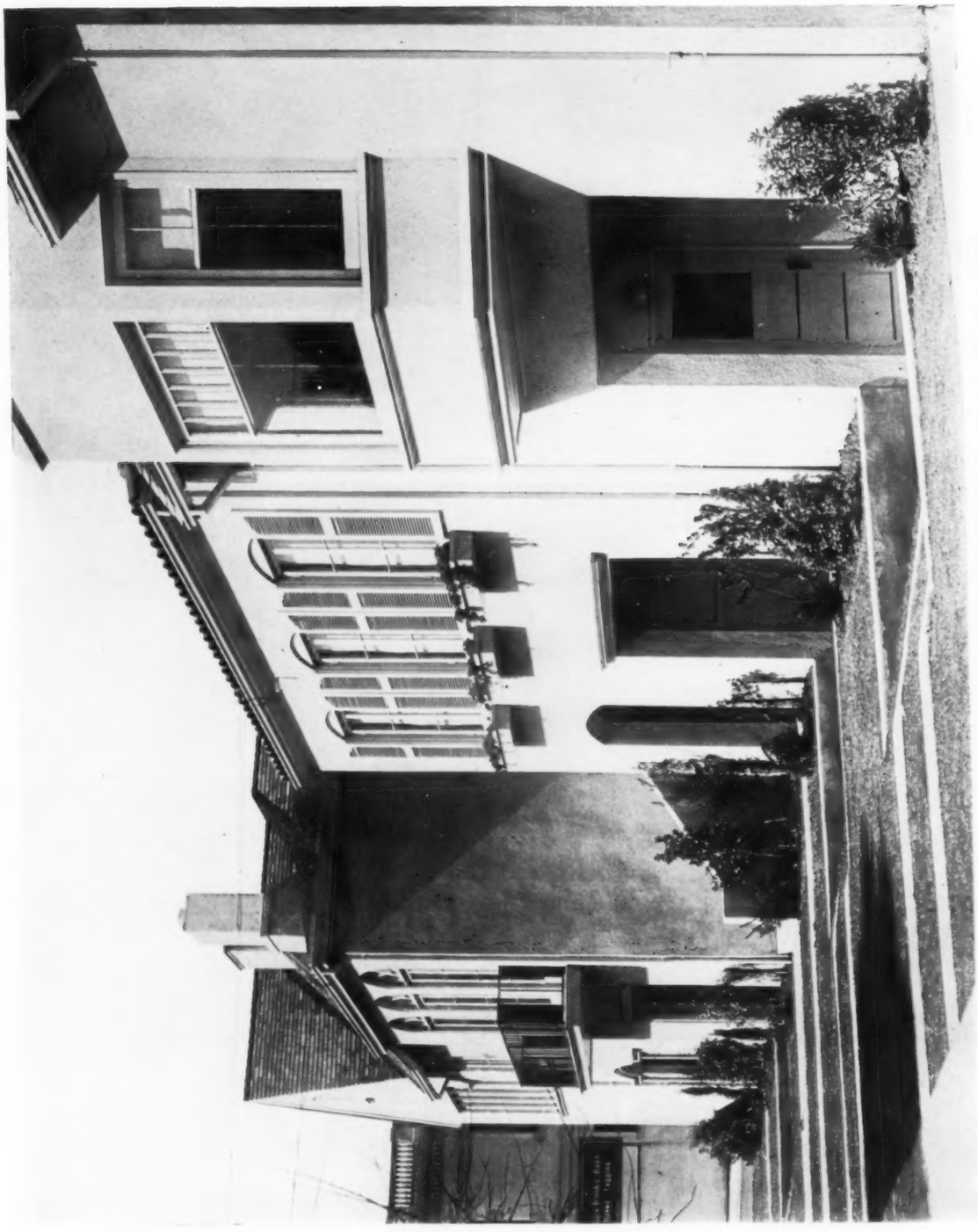
EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

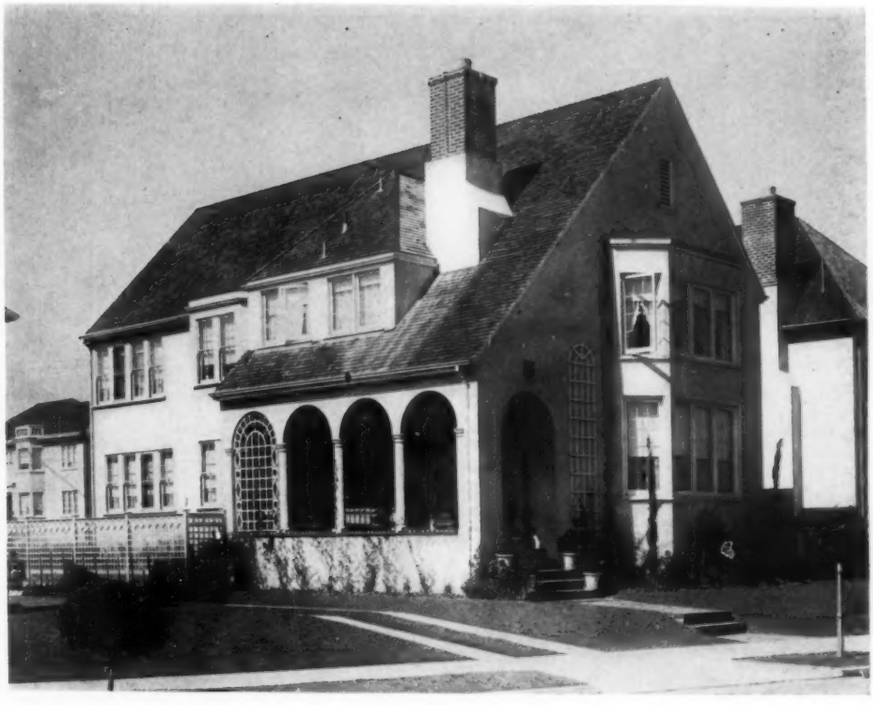


HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

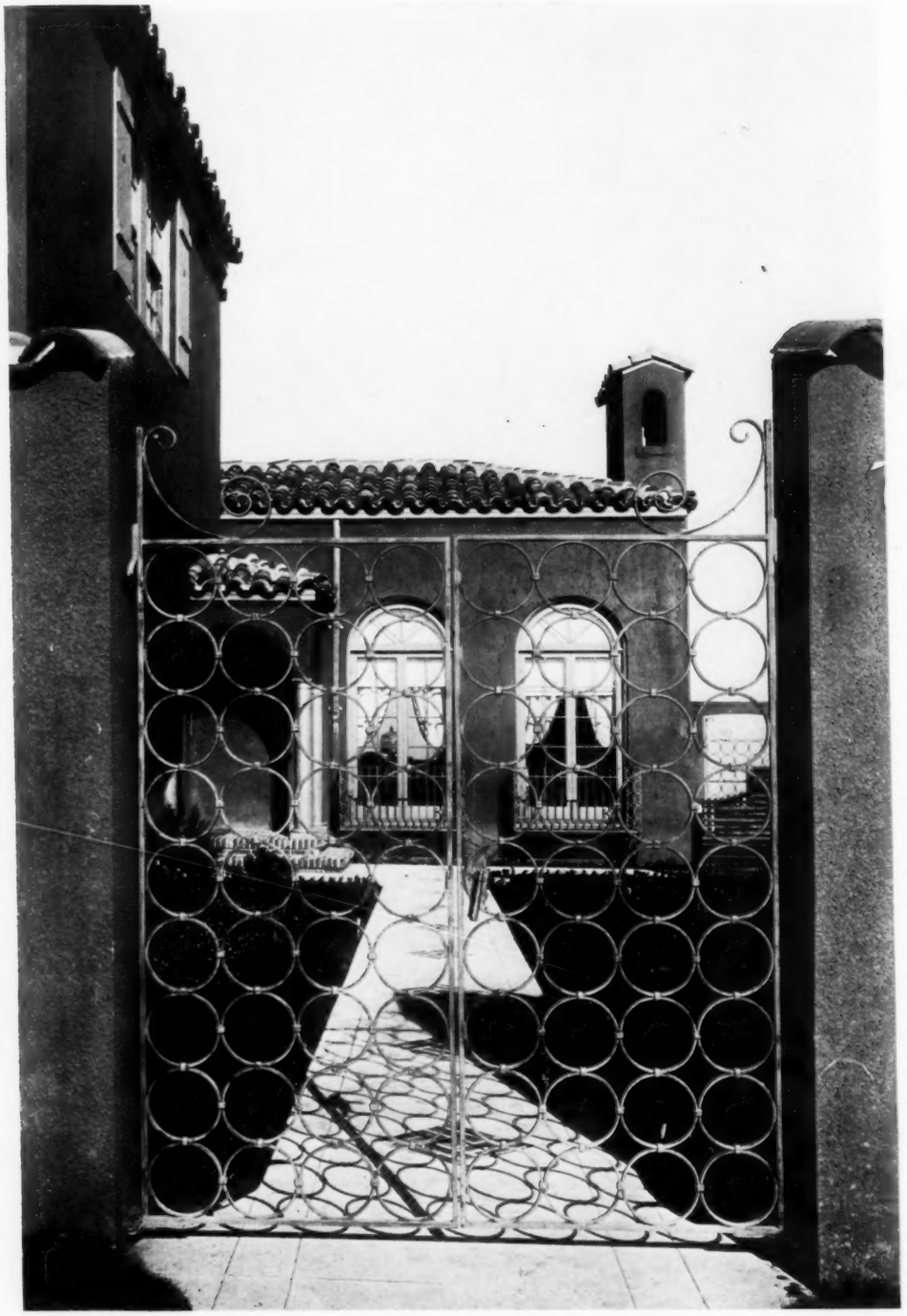
HOUSES IN SEACLIFF, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



HOUSES IN SEACLIFF, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



DETAIL OF ENTRANCE TO MR. JOHN BRICKELL'S RESIDENCE,
SEACLIFF, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

ment by adding a touch here and there of informality.

All this pertains to gardens, adjuncts to residences informal in character. Gardens immediately adjoining residences of classic design, naturally would conform in its lines and general scale to those of the residences, or else the classic beauty of the latter would be vitiated or lost. A gradual transition could then be effected from the formal to the more informal parts of the grounds. It is this lack of feeling for the proper relation of house and garden, that, in many instances, has practically destroyed any sense of harmony between the two.

What are the preliminary steps to be taken before laying out a garden? First, a careful survey of the site is necessary—taking note of all existing features; as, the general contour or lay of the land; any abnormal depressions or mounds; the presence of streams, native trees, rocks. Then a rough draft of the site should be made, preferably showing various contours and levels.

The prospective position of the house can be determined, if not already in place, so as to give the best possible views from the house, and to bring it into close and intimate relation with the surrounding property. Then, if the size of the estate permits, such features as pergolas, tennis courts, swimming pools, etc., may be added.

The size of the estate does not necessary prohibit making it as artistic, or more so, than one of wider expanse. The cameo, though of diminutive size, may contain as much detail as the large painting. Given a bare piece of ground of any dimensions, it is possible by clever artifices of plantings and placement of walks and vistas to so deceive the eye, as to make the estate appear several times larger than it really is.

The garden at all times should be considered but an extension of the house. This point is frequently neglected; we think of the garden as being a distinct entity, instead of being directly related to the house. And yet this is a grievous mistake to make. The house should be so designed as to make it a comparatively easy matter to lay out the grounds.

Let us take a position near the center bay window of the living room and picture to our mind's eye the best possible arrangement of lawn, shrubs, flowers, garden plots, pools, garden seats, pergolas, perhaps a sundial. Draw an imaginary line to some central feature—say a lily pond—and let everything else be in relation to that particular feature. How refreshing it is to be able to view a

landscape, preserving harmonious lines and some degree of order, rather than to witness a miscellaneous hodge-podge of unrelated parts!

Thus in fact we are but stepping from one living room into another, although the accounterments of the garden room consist mostly of living forms of trees, shrubs, grass, and flowers, with garden ornaments added to give a feeling of permanence, and to add to a background.

As we approach other parts of the grounds, a more liberal treatment of the landscape can be employed. If the size of the estate warrants it, charming vistas may be provided, affording, through correct placement of trees and shrubs, the most interesting views of the Bay and surrounding territory. The different features of the estate may be reached through adequate approaches; an arch here and there; some obstacle, such as sun-dial or crystal gazing-globe, placed in the middle of the path; a seat placed in a convenient spot, affording rest or pleasant views of the garden; a pergola leading from the house to a particular feature (which is its true mission), or acting as an ornamental adjunct of some garden scheme; a rose-covered summer-house in which to while away the sultry hours of the day (providing, of course, if we really have them); a pool of water to display water-loving plants, and to reflect the forms and foliage of trees, and colors of flowers and the sky; a little faun or satyr, half hidden in shrubbery, suggestive of the woodland; a fountain to supply the sound of running water, and to furnish beauty of architectural ornament. The interior court, called the patio, peculiar to houses of Spanish, Mexican or Mission design, affords the means of securing seclusion, and of including many of these features; it should be employed more often in California.

(To be continued)

A. I. A.

SAN FRANCISCO CHAPTER

Officers

Geo. A. Applegarth, President; Ernest A. Coxhead, Vice-President; J. Stewart Fairweather, Secretary.

Directors

Henry H. Meyers, three years; Harris C. Allen, three years; S. Schnaittacher, two years; Morris M. Bruce, two years; John Reid, Jr., one year; Geo. W. Kelham, one year.

Committees Ap ointed for the Year 1922

Practice—S. Schnaittacher, Chairman; G. W. Kelham, E. A. Coxhead, Geo. A. Applegarth.

Education—E. Coxhead, Chairman; J. Bakewell.

Competition—S. Schnaittacher, Chairman; William Mooser, G. A. Applegarth.

Coast Chapter—J. S. Fairweather.

Legislation, Building Laws, Engineers' Council, Contractors and Zoning—Henry H. Meyers, Chairman; William Mooser, Albert Schroepfer, Fred Meyer, Geo. A. Applegarth, S. Schnaittacher.

Public Information—Harris Allen, Chairman.

Membership—W. B. Faville, Chairman; E. Coxhead, A. G. Headman.

Special subjects for discussion, or speakers at Chapter Meetings—F. Meyer, Chairman.

Chapter Dinners—M. Bruce, Chairman; Smith O'Brien, A. G. Headman.

B-B Campaign—Fred Meyer, Chairman; S. Schnaittacher, Henry H. Meyers.

Industrial Association Membership—Clarence Ward, Chairman; Fred Meyer, Arthur Brown.

March 16th, 1922

The Regular Meeting of the San Francisco Chapter of the American Institute of Architects was held in the rooms of the San Francisco Architectural Club, 77 O'Farrell Street, on Thursday evening, March 16th, 1922. The meeting was called to order by President Geo. A. Applegarth.

The following members were present: B. S. Hayne, John Norberg, Wm. A. Newman, E. B. Bertz, Morris M. Bruce, W. B. Faville, S. Schnaittacher, J. J. Donovan, Harris Allen, A J. Evers, Chester Miller, John Bakewell, Arthur Brown, Fred Meyer, E. A. Coxhead, G. A. Applegarth, L. C. Mullgardt, John A. Baur, W. R. Yelland, Chas. P. Weeks, E. H. Hilderbrand, J. S. Fairweather.

Minutes

The minutes of the previous meeting held February 16th, 1922, were read and approved.

During the dinner hour the President introduced Mr. Runyon and Mr. T. Simpson of the Great Western Power Company, who gave an interesting talk on the use and coming use of electric power.

New Business

A letter from Mr. Edward Glass in explanation to an unauthorized article in the Chronicle was read and placed on file.

Next order of business was the election of delegates to the Chicago Convention of the American Institute of Architects, and the following ballot resulted:

Arthur Brown, 14; Henry Meyers, 12; John Bakewell, 11; Fred Meyer, 8; Wm. Mooser, 7; E. Coxhead, 7; Geo. A. Ferris, 4; F. J. Delongchamps, 1.

The first four were elected to go, and the recount of the tie for fifth place Mr. E. A. Coxhead won.

It was then moved and carried that there be no alternate delegates elected and if any of the above drop out they turn over their proxies to the members going.

Mr. L. C. Mullgardt, of Honolulu, who was at the meeting, gave a talk on conditions in the Islands.

Adjournment

There being no further business the meetings adjourned.

Respectfully submitted,

J. S. FAIRWEATHER, Secretary.

The regular meeting of the San Francisco Chapter of the American Institute of Architects was held on Thursday evening, February 16th, in the Architectural Club Rooms, 77 O'Farrell Street. The meeting was called to order by President George A. Applegarth.

The following were present: Morris Bruce, G. A. Applegarth, B. S. Hayne, S. Schnaittacher, J. S. Fairweather, Harris Allen, H. E. Burnett, E. B. Hurt, Col. Wood, W. J. Wilkinson.

Minutes

Minutes of the meeting held on January 19th, 1922, were read and approved.

Committee

The committee on competitions reported that the competition for the Honolulu Memorial Building was approved.

New Business

The Secretary reported that Mr J. J. Donovan's book on "School Architecture," and also the "Small House" book were added to the Club's Library.

It was moved and carried that the Chair appoint a committee to look into the Small House movement.

A communication in regard to restricted delegates to convention was read and placed on file. San Francisco Chapter is at present allowed six delegates.

Adjournment

There being no further business the meeting adjourned.

J. S. FAIRWEATHER, Secretary.

WASHINGTON STATE CHAPTER

February Meeting

The members welcomed the newly elected President, Carl Gould, to the chair.

Reports were heard upon the progress of organizing a Congress of Building Industries in Seattle, from Mr. Huntington, the temporary chairman of the organization, and from the Small House Committee on how the emergency in Oregon was being met. Some discussion was had in connection with the proposed war memorial in Seattle.

A report was made by the special committee on school buildings, at the request of Mrs. Josephine Preston, State Superintendent of Schools, that the Chapter advise with the State Superintendent of Education with reference to school buildings throughout the State. Following is a summary of their recommendations: (1) The Chapter to institute a competition amongst members for one and two room school buildings; (2) Working drawings of the above to be sold; (3) List of Chapter members to be distributed throughout the state to the County Superintendents. The selection of architects for school buildings to be made from these lists. (4) That the Chapter form a special committee to criticise school plans as such inspection is now required by law and requested of the Chapter by Mrs. Preston.

Following the business session a series of about fifty lantern slides were shown which had been obtained by the President on his recent Eastern trip. The pictures elicited much interesting comment and it is hoped that the Chapter may have many more such enjoyable evenings.

EDITORIAL

HOUSE AT FOURTH AVENUE AND FULTON ST.,
SAN FRANCISCO

If there is a human being in this country who does not realize that now is the time to build, it is because that person cannot read, or has lost mind or eye-sight. Beginning soon after the Armistice, the papers and the magazines and the bill-boards have proclaimed loudly and repeatedly "Own Your Home!" "Build or Buy Now!" "Be Your Own Landlord!" or "Pay Taxes Instead of Rent!"

The construction industry has gone cheerfully (or gloomily) on, following the usual barometer of business conditions. Building is a matter of cold cash, after all, and money is too coy to be tempted away from shelter by the honeyed words of the press. Yet we all retain something of the credulity of children, and after a thing has been repeated often, there will be plenty of people who believe it is so.

Whatever the psychology or the reasons, the fact stands out now too clearly to be doubted; construction, joining or leading the trend of general business, shows an unmistakable activity and increase. The song of the rivet is heard on the hill, the hammer has been put to its legitimate use again, and the heart of the dealer is happy once more; providing it be admitted that he possess such an organ.

Whereupon the Era of the Exposition springs into being with fresh missionary enthusiasm. Every Auditorium is to have an Exposition all its own; Model Home Expositions, Garden, Electric Expositions are upon us.

And why not? At the least, some money has been put into circulation, some energy created, some interest aroused. It may be too much to hope for, that the public appreciation of aesthetic merit should increase noticeably; but a glimpse of the tremendous complication of modern building, the bewildering varieties of devices and materials and attachments, may well impress upon the public that expert advice is desirable. And there is need of such conviction. Many a man who would not dream of prescribing for his own illness, or of trying his own case, will innocently assume the manifold responsibilities of building operations. Miles of our streets eloquently tell the tale.

And so we say, Success to the Expositions! May their doors be crowded!

INDUSTRIAL

PACIFIC COAST MARKET OFFERS GLASS MANUFACTURING INDUSTRY AN ATTRACTIVE FIELD IN WHICH LOCAL CAPITALISTS WILL SOON BE ACTIVE

No great, lasting prosperity will ever come to the Pacific Coast until we begin to make for ourselves—here—many of the manufactured products with which the East is now providing us. We've told the world for years about the wonderful climate we have for working. But it doesn't mean anything unless we take advantage of it.

San Francisco was given a demonstration during the war of the value to a community of great industrial payrolls. The activity in the shipyards when shipbuilding here gave steady employment to 50,000 men and the prosperity of the retail merchants of the bay district, were closely related. The magnitude of the shipyard payrolls was directly reflected in the hectic prosperity of the big dry goods stores and other institutions whose success depends on popular demand for luxuries and necessities and the ability to pay for them.

There we had a practical illustration of a condition which can be made permanent by the establishment on the Pacific Coast of plants to manufacture even a few of the products which the East is making for us and on which the East takes the full manufacturer's profit.

In looking over the field in which the readers of this magazine are particularly interested—the building industry—one cannot help being impressed by the fact that comparatively little of the manufactured material which goes into construction work is made on the Pacific Coast.

A complete survey of the manufactured products shipped from the East to the Pacific slope during one normal year would, without, a doubt, reveal many opportunities for manufacturing enterprises on this coast. The railroads, for reasons of their own, guard this information most jealously, in spite of the fact that the establishment here of more large manufacturing plants would in the end benefit transportation enterprise more, perhaps, than any other activity.

It required no survey, however, to learn that practically all the window glass used on the Pacific Coast is manufactured in the East.

In an effort to find out something about the Pacific Coast's annual glass bill the Building Review sent out a questionnaire to the principal cities of the Pacific Coast asking for the record of 1921 building activity segregated as follows: Office Buildings, Hotels, Store Buildings, Apartment Houses, Residences, other buildings.

This segregation was based on a preliminary survey made to ascertain the percentage of building cost that goes for glass. The percentage varies with the class of building and the questionnaire was classified according to these variations.

While the response to our questionnaire didn't give us anything like a complete record of 1921 building activity, it gave us enough to suggest that the glass manufacturer would find this side of the continent a profitable field for investment.

Here is what our information showed. Out of building construction in 1921 amounting to more than $180,000,000, there was spent for glass alone practically $7,000,000.

Our questionnaire covered the principal cities of California and Seattle, Tacoma and Portland, outside the state. The activity in 1921 was hardly normal. The record will probably be more than doubled in 1922 and is not likely to run as low again for many years.

For the comfort of architects and owners to whom the high price of glass has been one of the stumbling blocks in the way of promoting or undertaking new work, we are able to say that local capitalists, able to finance any venture they might undertake, are well advanced in a plan for the manufacture of glass of all kinds on the Pacific Coast.

This much we can say at this time: There

(Concluded on page 40)

100 PER CENT ELATERITE

HOW NATURE HAS PRODUCED A MATERIAL WHICH USED UNADULTERATED WITHSTANDS THE ACTIONS OF ACIDS—ALKALI AND TEMPERATURE CHANGES

The mountainous region called Uinta Basin in the state of Utah is remarkable for its deposits of Hydro-Carbons and Natural Bitumens, some of which by reason of peculiar geological conditions in past ages had been metamorphosed into new and distinct substances found nowhere else. Among these ores first discovered in 1885 were Gilsonite, Asphaltum and Elaterite. Although having a common origin and having to some extent a similar appearance, they are entirely different in other respects.

Gilsonite, while remaining an asphaltum, was solidified and endowed with a higher fusing point than any other natural asphaltum. It is found in veins as much as 20 feet thick, is easily mined, readily fusable and melts below 300 degrees Fahrenheit. It is soluable in the usual solvents and used in the manufacture of paints and valuable for this purpose.

Elaterite is classed with the Pyro-Bitumens, as it is infusable, insoluable, not yielding to any known solvent. It is found in *vertical veins,* varying in width from 6 to 30 inches. To become usable the ore must be subjected to heat in specially constructed retorts or stills at from 700 to 800 degrees Fahrenheit, volatile oils extracted, undergoing what is known as depolymerization, that is breaking down the complex groups of molecules into simple ones.

Structurally, the two ores are different, the molecules of Gilsonite being globular, while those of Elaterite elongated, the length being three or four times greater than the width. It is to this peculiar form of molecules that Elaterite owes its remarkable elasticity and toughness, cutting like whalebone, the shaving being elastic. This of course is not true of Gilsonite, which is characteristic as it is all hardened asphaltum by brittleness. This feature marks a radical difference, the importance of which is very apparent in material used to withstand hard usage and exposure as is the case with Floorings, Waterproofings and Preservatives. Vegetable oils and fats of various kind are added to Gilsonite in order to supply elasticity and tensil strength, and rosin or similar substances to give it hardness, not one of which could be used however without detracting as much value from the durability of the material as the added hardness gives. Elaterite has all these elements so necessary for materials for such uses as flooring and waterproofing in its own gum to a higher degree than could be reached by the use of anything that could be added and it is used entirely unadulterated, 100 per cent.

Used as Waterproofing, Elaterite Gum held in solution by a substance which quickly evaporates, leaves a film of pure mineral rubber. The liquid penetrates the pores of the construction work and becomes a tangible, inseperable part of anything to which it is applied. The seal thus formed becomes a tough, elastic shield, which is absolutely unaffected by water, dampness, acids or alkalies. As a bond for plaster and concrete, Elaterite has no equal, and it will readily take paint and will not stain through. Laboratory tests have shown this material to be unaffected by the following acids: Fifty per cent solutions of Nitric, Hydrocloric, Sulphuric and Caustic Acids. Burnt Lime allowed to slack in a dish covered with Elaterite had no effect on it.

Used as Flooring,—An eastern concern, which for some years had been using Elaterite in the manufacture of Waterproofing, found that Elaterite Gum, scientifically mixed with Asbestos and other mineral aggregates, produced a flooring material which had astonishing wearing quality, combined with resiliency, waterproofing and sanitary qualities. It was soon recognized by architects and users as the floor surfacing so long desired in place of stone hard cement floors and the less resilient types of composition floors containing magnesite. It also in many places proved its superiority over the thick Asphalt Mastic Floorings. Gradually it found its way into all types of buildings until it is now used in place of linoleum in schools, hospitals, naval training stations, theaters, office buildings, factories and a great number of other private and public buildings. Although in most cases as little

(Concluded on page 40)

BUILDERS' EXCHANGE ANNUAL BANQUET

An affair that will hold special interest for all engaged in the building industry and general interest for the community at large, will be the annual banquet of the Builders' Exchange to be held April 19 at the Palace Hotel.

This banquet, according to officers of the exchange, will be more than the get-together social evening of the organization. Lavish plans have been made for entertainment, and as a banquet the affair is going to be a success if some of the best fun organizers in San Francisco build according to the plans that have been laid down. It is going to be more than a banquet, however.

The builders are already the busiest men in San Francisco and they are going to be busier before the year is much older. One of the important features of the banquet—it will come ahead of the fun—will be a discussion of some of the plans that have been made by the building industry to help San Francisco break all construction records in 1922.

The committees in charge of the banquet are:

Publicity Committee—Clarence F. Pratt, Chairman; R. B. Cleghorn, Thomas Price, John H. Sears, A. Fred Lindgren.

Sales Committee—Charles M. Cadman, Chairman; H. D. Poitras, George Dixon, Emil Hogberg, Jas. H. Pinkerton, Frank Mecklenberg, A. D. Coleman, E. T. Thurston, Arthur Elkins, Robert Cleghorn, Steve Guerin, Chris Berg.

Music and Entertainment—Joseph B. Keenan, Chairman; Alex Mennie, Charles Gunn, Charles Adams, Herman Lawson.

Reception Committee—Alfred Swinerton, Chairman; George Forderer, Atholl McBean, Wm. C. Duncan, C. U. Carle, George Wagner, P. A. Palmer, Felix Kahn, J. A. Plunkett, C. J. Hillard, J. E. Gwynn. There will also be a representative from each craft on the reception committee.

FURNACE THAT VENTILATES

W. A. Andrews, formerly with the Kleiber Truck Company of San Francisco, has been appointed sales manager for the Bockmann-Rusch Hardware Company, distributors for the Homer Pipeless Furnace. This heating system occupies less than five feet of floor space, and is adjustable to any height of basement from six feet up. A patented inner lining keeps the outside of the furnace cool at all times and directs the heat waves through floor vents to the rooms to be heated. No heat is wasted on an unused basement.

The attention of architects is directed to the fact that the furnace in addition to being a heating device always under control and of great efficiency, also insures a constant circulation of air throughout the home.

THE OVERALL LAUNDRY
AND SUPPLY CO.
JOS. T. CAVANAUGH
Mending and Buttons Sewed On
Daily Service Around the Bay
1140 Harrison Street
Tel. Market 143 San Francisco

COTTON & CO, Inc.
LANDSCAPE ARCHITECTS and ENGINEERS
638 New Call Building
Phone Douglas 5541 *San Francisco*

PLAN YOUR FUTURE HOME NOW
SEND FOR STILLWELL BUILDING BOOKS WITH ECONOMY PLANS
of new California Styles suitable for any climate. Famous for comfort and beauty.
"Representative California Homes" 50 Houses—7 to 10 Rooms—$1.
"The New Colonials" 60 Houses—6 to 10 Rooms—$1.
"West Coast Bungalows" 50 Houses—6 and 7 Rooms—$1
"Little Bungalows" 75 Houses—3-4-5 Rooms—$1.
SPECIAL OFFER: Send $2.50 for any three of these books and get Garage Folder FREE.
Money back if not satisfied
E. W. STILLWELL & CO., 790 California Building, Los Angeles

NORMAN D. BISHOP
LIGHTING FIXTURES
ANDIRONS LAMPS
801 Title Guarantee Building
220 W. 5th Street
LOS ANGELES Broadway 3430

Phone Franklin 2492
A. C. WOCKER
INTERIOR DECORATOR
1370 Sutter Street San Francisco, Cal.

Dependability—"Since 1858"

LINOLEUMS, WINDOW SHADES, CARPETS, DRAPERIES, RUGS

Estimates Furnished

D. N. & E. WALTER & CO.

Wholesale

562-572 Mission Street, San Francisco

Los Angeles Portland Seattle

New York Chicago Pittsburgh San Francisco

Phones: Douglas 6130-6131

INCANDESCENT SUPPLY CO.

Manufacturers of

LIGHTING FIXTURES

726 Mission Street

Concrete Foundations Sidewalks, Etc.

Reinforced Concrete Construction

C. C. SAYRE

CONCRETE CONTRACTOR

PHONE PACIFIC 413

541 Twenty-sixth Avenue, San Francisco

Convenient Electric Wiring

Pacific Electric Construction Co.

Wiring, Motors, Repairs, Supplies—Mazda Lamps and Fixtures

1117 Market Street Phone Market 5304

526 Magellan Avenue
Phone Sunset 227

180 Jessie Street
Phone Sutter 6700

James Cantley Roofing Co.

Asphalt, Felt and Gravel Roofing

Roof Repairing Promptly Attended To

San Francisco, Calif.

Van Arsdale-Harris Lumber Company

Large Stock of Dry Clear

Douglas Fir White Cedar

Humboldt Redwood

Sugar Pine White Pine Spruce

INQUIRIES SOLICITED

Telephone Kearny 2076

FIFTH AND BRANNAN STREETS

San Francisco

Atlas

Heating and Ventilating Co.

"Everything in Heating"

San Francisco

From Tree to Consumer

Sunset Lumber Co.

First and Oak Sts., Oakland, Calif.

Telephone Oakland 1820

LUMBER AND MILLWORK

MAKES OPEN FIREPLACE POSSIBLE ANYWHERE

Here is an invention that the camera can't tell you very much about. This because photography, intense as has been its development, is still limited in its scope when it comes to portraying elements like cheerfulness.

This invention, recently placed on the local market under the trade name of "Magicoal," is of special interest to architects who are building new homes, club houses and hotels or remodeling old ones. It takes the place of the open fire without any of the disadvantages that form part of the price we must pay for this old fashioned comfort.

"Magicoal," as its name implies, is a coal made magic by electricity, which makes it possible so perfectly to imitate a flaming and red hot coal fire that people sitting immediately in front of a grate filled with these electrically inspired coals could never tell that it was not the real black diamonds. It can be lighted by turning on a switch and extinguished just as readily.

It can be used to furnish an imitation fire without giving off any heat or it can combine with its cheerful glow just as much heat as is necessary to make the room comfortable.

This new invention makes it possible to provide any room with an open fire regardless of whether or not there is a flue. There is no dust, no dirt, no objectionable fumes—not even heat unless you want it.

The first basket of these magic coals was demonstrated in action the other day to the directors of the Pacific Gas & Electric Company and can now be seen by architects at 589 Howard Street. It is something new, but you must see it to know how effective it is.

GLASS BRICKS FROM BROKEN BOTTLES

Glass bricks are being made in France by the Garchey process, a patented procedure, by the Garchey Glass Brick Company (Societe Anonyme de Perre de Verre Garchey). The company was founded in 1900 with a capital of $115,800, prospered very well and has developed into one of the most prominent concerns in this line of glass manufacturing. Factories at Toulouse, Lyon, Creil, and Demi-Lune are almost entirely devoted to the making of glass bricks.

ELATERITE

(Concluded from page 37)

as from one-eighth to three-sixteenths of an inch in thickness, its wonderful toughness and flexibility made this floor adaptable in places where others had failed, as it is unaffected by temperature changes and will not crack or peel. For decking on flat roofs used for porches it is also used to great advantage over other materials.

The Insulite Chemical Company of Aurora, Illinois, are the discoverers of the adaptability of Elaterite for Floorings and Waterproofing, and have for the past twelve years extended their operations, so that their products are becoming generally known throughout the United States and Canada. Recently they have opened a branch office for the Pacific Coast in San Francisco, and intend to follow up with facilities for manufacturing as soon as their materials become generally known.

GLASS MANUFACTURING

(Concluded from page 36)

is in California an inexhaustible supply of sand suitable in its natural state for many kinds of glass making. This sand in its natural state is combined with certain substances which have prevented its use in the manufacture of window glass. A way has been found to get rid of these deleterious intruders, and, in the opinion of practical chemists and engineers, the method is efficient and commercially practicable.

In an early issue of the Building Review we expect to give the details of the interesting experiments that led this group of industry builders to believe that we could keep a large part of our annual glass bill at home. With these details will be the announcement that the Pacific Coast has established a plant for the manufacture of all kinds of glass and that one more step has been taken towards making this the industrial hive it should be.